

No.



8300149

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

G. H. Pogue Seed Co., Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE VARIETY AS DETERMINED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LAURISAGRASS

'Cowboy'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this *31st* day of August in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

Kenneth H. ...
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY 4347		1b. VARIETY NAME Cowboy		FOR OFFICIAL USE ONLY PV NUMBER 8300149	
2. KIND NAME Laurisagrass		3. GENUS AND SPECIES NAME Pennisetum orientale		FILING DATE 6/21/83	TIME 8:30 A.M. X.M.
4. FAMILY NAME (BOTANICAL) Graminae		5. DATE OF DETERMINATION September 1, 1981		FEE RECEIVED \$ 1,000 \$ 500	DATE 6/21/83 7/28/83
6. NAME OF APPLICANT(S) G.E. Pogue Seed Co., Inc.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Drawer 389 Kenedy, Texas 78119		8. TELEPHONE AREA CODE AND NUMBER 512/583-3456	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Texas - May 9, 1973		11. DATE OF INCORPORATION May 9, 1973	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Gary E. Pogue G.E. Pogue Seed Company, Inc. P.O. Drawer 389 Kenedy, Texas 78119					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☐ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

(DATE)

June 15, 1983

(DATE)

FORM GR-470 (1-78)

President, G.E. Pogue Seed Co., Inc.
(SIGNATURE OF APPLICANT)

Gary E. Pogue
(SIGNATURE OF APPLICANT)

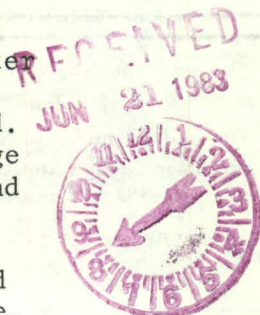
Pres.

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



Pennisetum orientale

Laurisagrass

'Cowboy'

13A. Exhibit A:

'Cowboy' was chosen as the best selection of four distinct types of Pennisetum orientale obtained from a single source. The original source of Pennisetum orientale was obtained as a contaminate among a Cenchrus ciliaris collection obtained from the Plant Introduction Center, Experiment, Georgia. The original identity of the source is unknown.

The original Pennisetum orientale source was a facultative apomict. From seed increase of the original plant, four new distinct plant types were discovered that were increased and uniform. The source plants were tested for cold hardiness and then evaluated for seed production and forage yield and quality. One line designated as 'Cowboy' was chosen as the best line and is being increased for production.

'Cowboy' is stable and uniform and is an obligate apomict. No variants have been observed during 5 generations and in a seed increase field of 50,000 plants.



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13B. Exhibit B. Novelty Statement

'Cowboy' differs from other Pennisetum orientale specimens in having a bulbous base on the stems, and fewer bristles with less dense cilia lower on the bristles. 'Cowboy' is similar to the other 3 accessions tested but 'Cowboy' has longer internodes and is 25% taller, and flowers 10 days earlier, with seed heads one-third longer, producing 6% more seed.

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OBJECTIVE DESCRIPTION OF VARIETY

Laurisagrass (Pennisetum orientale)

Name of Applicant:	VARIETY NAME OR TEMPORARY DESIGNATION: Cowboy
Gary E. Pogue, G.E. Pogue Seed Co., Inc.	FOR OFFICIAL USE ONLY
Address:	PVPO NUMBER 8300149
P.O. Drawer 389	
Kenedy, Texas 78119	

1. PLANT HEIGHT (Longest Shoot from Soil Surface to Top of Head):

 CM. HEIGHT

2. HABIT:

- STEMS: 1=Simple 2=Simple and branched from base and lower stem nodes.
- STEMS: 1=Coarse 2=Fine STEMS: 1=Geniculate 2=Erect
- LEAVES: 1=Erect 2=Ascending

3. RHIZOMES:

- 1=Absent 2=Present
- LENGTH: 1=Short (Up to 10 cm.) 2=Medium (10 - 20 cm.) 3=Long (21 - 40 cm.)
- THICKNESS: 1=(3 - 6 mm.) 2=(7 - 10 mm.)
- CORIACEOUS SCALES: 1=Present 2=Absent

4. LEAF BLADE:

- SURFACE: 1=Flat 2=Convolute
- COLOR: 1=Light Green 2=Moderate Green 3=Dark Green 4=Blue Green 5=Blue
- MM. WIDTH
- CM. LENGTH
- UPPER SURFACE: 1=Scaberulous 2=Pubescent 3=Glabrous
- LOWER SURFACE: 1=Scaberulous 2=Pubescent 3=Glabrous
- LEAF EDGE: 1=Toothed 2=Smooth

5. LEAF SHEATH:

- UPPER SHEATH: 1=Open 2=Overlapping SEEDLING COLOR (Base): 1=Green 2=Red
- KEEL: 1=Not Keeled 2=Keeled SURFACE: 1=Glabrous 2=Pubescent 3=Scaberulous

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6. LIGULE:

- ☐ 1 MEMBRANE: 1=Densely Ciliate 2=Glabrous
- ☐ 1 HAIRS: 1=Less than 1 mm. 2=More than 1 mm.

7. STEM NODES:

- ☐ 2 NODES: 1=Not Apparent 2=Slightly Swollen 3=Prominently Swollen
- ☐ 2 HAIRS ON NODES: 1=Absent 2=Present
- ☐ 2 LENGTH OF NODE HAIRS: 1=(1 - 2.5mm.) 2=(3 - 4mm.)

8. INFLORESCENCE:

- ☐ 1 TIP OF PEDUNCLE: 1=Glabrous or Minutely Pubescent 2=Hairy
- ☐ 1 RACHIS: 1=Villous or Woolly 2=Glabrous
- ☐ 1 RACHIS: 1=Ribbed or Grooved Vertically 2=Not Ribbed, Cylindrical
- ☐ 2 RACHIS: 1=Straight 2=Flexous (Curved Alternately)
- ☐ 2 ☐ 5 ☐ 0 MM. LENGTH ☐ 1 ☐ 8 MM. WIDTH
- ☐ 3 ☐ 0 ☐ 0 NUMBER OF HEADS PER PLANT
- ☐ 2 ☐ 3 ☐ 0 NUMBER OF INVOLUCRES PER HEAD
- ☐ 4 ☐ 3 ☐ 9 MILLIGRAMS INVOLUCRES PER HEAD
- ☐ 1 ☐ 0 ☐ 8 MILLIGRAMS CARYOPSIS PER HEAD
- ☐ 2 COLOR AT ANTHESIS: 1=White 2=Purple Bristles and Glumes 3=Manila
- ☐ 2 COLOR AT MATURITY: 1=White 2=Manila 3=Brown 4=Purplish

9. INVOLUCRES OR FASCICLES:

- ☐ 1 ☐ 8 MM. LENGTH TO TIP OF LONGEST BRISTLE
- ☐ 5 MM. WIDE AT BASE OF INVOLUCRE
- ☐ 1 ☐ 3 MM WIDE AT TOP OF BRISTLES
- ☐ 1 SPIKELETS PER FASCICLE: 1=Usually 2 - 5 2=Single Only
- ☐ 1 SPIKELETS: 1=Pedicelled (Pedicels 0.5 - 1mm.) 2=Sessile
- ☐ 1 PEDICEL OF INVOLUCRE: 1=Hispid 2=Glabrous
- ☐ 1 PEDICEL OF INVOLUCRE: 1=(1 - 1.5mm.) 2=(0 - 0.8mm.)
- ☐ 2 BRISTLES ORIGINATING: 1=At Base Only 2=At Base and Subtending Spikelets
- ☐ 3 ☐ 5 NUMBER OF BRISTLES

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☐ 3 MM. LENGTH OF SHORTEST BRISTLES☐ 1 ☐ 3 MM. LENGTH OF INNER BRISTLES☐ 2 CILIA ON BRISTLE: 1=Lower 1/3 2=Lower 1/2 3=Lower 2/3☐ 2 CILIA LENGTH: 1=Less than 1 mm. 2=(1 - 1.5 mm.) 3=Greater than 2 mm.☐ 1 CILIA DENSITY: 1=Light 2=Moderate 3=Dense

10. SPIKELETS:

☐ 2 SPIKELET LENGTH: 1=Less than 4.5 mm. 2=(4.5 - 6.0 mm.) 3=Greater than 6.5 mm.☐ 1 LOWER GLUME: 1=1/4 Length of Spikelet 2=1/3 Length of Spikelet 3=1/2 Length of Spikelet☐ 2 UPPER GLUME: 1=1/2 Length of Spikelet 2=2/3 Length of Spikelet 3=3/4 Length of Spikelet☐ 1 LEMMA (Longest): 1=Aristately Acuminate -(5 Nerved) 2=(3 Nerved)☐ 1 STIGMAS: 1=Purple 2=White 3=Pink

11. SEED HEAD:

☐ 1 APPEARANCE AT ANTHESIS IN MASS: 1=Purplish cast due to purple bristles (but not cilia)
purple stigmas, marginally purple lemmas and glumes,
and purple stamens in one floret of the involucrel.

2=As above but purple bristles remain at maturity.

3=Only purple stigmas, a white to greenish cast.

12. SEED:

☐ 1 ☐ 0 MM. WIDTH☐ 2 ☐ 2 MM LENGTH☐ 1 ☐ 0 ☐ 8 GRAMS PER 1000 SEEDS☐ 3 SEED SHATTER RESISTANCE: 1=Poor 2=Good 3=Strong

13. ENVIRONMENTAL RESISTANCE:

☐ 3 COLD INJURY☐ 3 POOR DRAINAGE☐ 3 DROUGHT☐ 2 COMPETITIVE SPECIES☐ 2 POOR FERTILITY

--- 1=Susceptible 2=Tolerant 3=Resistant

14. PLANT CROWN AND ROOT STRENGTH

☐ 1 1=Strong 2=Moderate 3=Weak

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13D. Exhibit D. Additional Description of 'Cowboy'

BOTANICAL DESCRIPTION

OF

LAURISAGRASS

Pennisetum orientale

Plant Variety Name 'Cowboy'

Perennial with erect culms 1-1.8 m tall, branched largely at basal nodes with some secondary erect culms arising from the lower 6-8 nodes on a primary culm, with long (21-30 cm), thick (7-10 mm) creeping rhizomes covered with coriaceous scales. Leaf-blades (6-8) are 30-60 cm long and 6-18 mm wide, flat, scaberulous, slightly pilose, and moderate green in color. The leaf edge has 10 saw-teeth per mm. The leaf sheath is glabrous and not keeled or imbricate. The first sheath of an early seedling is red. The ligule is a short densely ciliate membrane, the hairs mostly .75-1.0 mm long. Stem nodes are slightly swollen with a band of fine hairs 4 mm wide. Inflorescence 8-35 cm long (22 typical), and 1.5-3.0 cm broad (2.0 typical), varies from widely separated fascicles (12 mm) to highly dense fascicles (0.5 mm) usually cylindrical or whorled, and 8-270 (220 typical) fascicles per inflorescence depending on environment, usually manila or straw colored on maturity. Tip of peduncle is glabrous or very slightly puberulous; the rachis villous or woolly, ribbed or grooved vertically, and \pm flexuous (curved alternately in opposite directions). The involucre is borne on a hispid pedicel, 1-1.5 mm; enclosing 1-6 spikelets on pedicels of .5-1.0 mm. Bristles are 3-13 mm long, manila colored, 10-45 per involucre, with long cilia (1-1.5 mm) on margins of lower one-half of bristles. One bristle per involucre is usually longer than the rest and typically measure 18 mm. Spikelets are lanceolate, 4.5-6.0 mm long. Lower glume is two-thirds the length of the spikelet, acuminate and three-nerved. The lower lemma is similar to the upper lemma, 4.5-5.5 mm long, aristately acuminate and five-nerved. The caryopsis is turgid, ovoid, 1.0 mm wide and 2.0 mm long.

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13D. Exhibit D. Additional Description of 'Cowboy' (con't)

'Cowboy' has excellent tolerance to frost and light freezes, remaining green. 'Cowboy' also has excellent cold temperature survival. 'Cowboy' has tolerated minus 26°C air temperature and a soil temperature at 11 cm of minus 6°C with no loss of stand. This would place the range of adaptation of 'Cowboy' on the ARS and United States Department of Agriculture "Plant Hardiness Zone Map" in zones 6 through 10 and into some areas of zone 5.

'Cowboy' is drought tolerant and grows well with 45 cm of rainfall. During severe drought periods of no rain the stems still remain green while the leaves are dry.

The morphology of the plant changes with environment within a location and at different locations. The characteristics of 'Cowboy' affected are plant height, leaf width, and inflorescence length and density. The inflorescence also varies with the age of the plant, being as short as 5cm and having 6-10 fascicles on very young plants. The seed heads generally become longer and fuller as the plants reach full maturity at about two to three years of age.

'Cowboy' produces seed heads continually throughout its growing season at 29° latitude. Peak seed production periods of 'Cowboy' at Kenedy, Texas are from May 1 to June 15 and October 1 to November 15. The seeds of 'Cowboy' do not shatter at maturity but are retained on the rachis for about 10-12 days after the rachis turns straw colored.

There are approximately 577,000 seeds per kilogram as harvested in the involucre in field-run seed. The caryopsis is light brown and ovoid in shape and weighs 0.6265-1.0000 g per 1000. The involucre unit consists of 46% caryopsis and 54% involucre bristles and scales by weight on the average.

Forage quality of 'Cowboy' appears to be excellent averaging 60% digestible dry matter at nine weeks of maturity. The protein content is exceptionally high in mature forage, being 15.4% to 11.5% protein in 9 to 13 week old forage samples under moderate fertility. Mature green forage samples typically analyze 65% moisture and 35% dry matter content.

'Cowboy' appears to differ from other Pennisetum orientale in that the mature seed heads of 'Cowboy' are manila colored while the seed heads of other Pennisetum orientale are white, purplish, or light brown.

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13D. Exhibit D. Additional Description of 'Cowboy'

'Cowboy' differs from the other 3 lines of Pennisetum orientale tested, in having seed heads 33% (25cm vs 18cm) longer and 50% (.75g vs .50g) heavier than the other 3 lines. 'Cowboy' is also typically about 25-30 cm taller than these 3 lines. The hairs of the ligule of 'Cowboy' are mostly .75-1.0 mm long while the hairs of the ligule of the other 3 lines are mostly .5-.75 mm long. The leaf edges of 'Cowboy' have about 10 saw-tooth projections per mm while the other three lines have 7-8 saw-tooth projections per mm. The band of hairs on the nodes of 'Cowboy' are 3-4 mm wide and only 2-2.5 mm wide on the other 3 lines.

Six photographs are attached to this application. The photographs are labeled and their description follows.

Photo A: The general appearance of 'Cowboy'.

Photo B: Seedling year plants of 'Cowboy' showing several inflorescences with widely spaced fascicles. The purple coloration of the bristles and bracts of the spikelets are typical of the plants only up to anthesis. As the heads mature they become manila colored.

Photo C: Typical mature seed heads of 'Cowboy' showing the arrangement of the involucres. The length of the inflorescence is shown in inches.

Photo D: Typical mature involucres of 'Cowboy' showing the bristle arrangement and containing 1-6 spikelets.

Photo E: The caryopsis of 'Cowboy' showing shape, size, and color.

Photo F: An enlarged view (ca 20 x) of the caryopsis of 'Cowboy' showing the fine detail of upper and lower surfaces.





G.E.
**POGUE
SEED CO.
INC.**

P. O. DRAWER 389 - KENEDY, TEXAS 78119
PHONE A/C 512 - 583-3456

MEMBER
TEXAS SEED TRADE ASSOCIATION
SOUTHERN SEEDSMEN'S ASSOCIATION
AMERICAN SEED TRADE ASSOCIATION

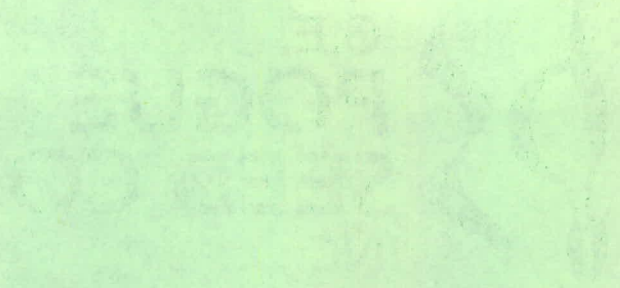
LAURISAGRASS

Pennisetum orientale

'Cowboy'

This copy of photographs is to be kept by the
patent office.

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LAURISAGRASS
'Cowboy'

Photo A



LAURISAGRASS

'Cowboy'

Photo B



- LAURISAGRASS
'Cowboy'

Photo C



- LAURISAGRASS Photo D
'Cowboy'

INCHES

1

METRIC

2

3

4



- LAURISAGRASS
'Cowboy'

Photo E



- LAURISAGRASS
'Cowboy'

Photo F